



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,598	02/06/2002	Jici Gao	SUN-P7318	8282
22200	7590	09/09/2005	EXAMINER	
PARK, VAUGHAN & FLEMING LLP 39180 LIBERTY STREET SUITE 103 FREMONT, CA 94538			TODD, GREGORY G	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,598

Applicant(s)

GAO, JICI

Examiner

Gregory G. Todd

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is a second office action in response to applicant's amendment filed, 14 June 2005, of application filed, with the above serial number, on 06 February 2002 in which claims 1-7 and 12 have been amended. Claims 1-26 are therefore pending in the application.

2. It is noted Applicant only lists claims 2-5 and 7 as having been amended, however, claims 1-7 and 12 have been amended.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (hereinafter AA) in the Background of the Invention, in view of Desai et al (hereinafter Desai) US Patent 5,812,767 in further view of Banerjee et al (hereinafter Banerjee) US Patent Application Publication 2003/0110285.

As to claim 1, AA teaches in the Background, a method of adapting a data link user for medium type, comprising:

at a data link provider, receiving from a data link user through an interface defined between the data link provider and the data link user, a request to identify a medium access control type supported by the data link provider (AA, page 1 line 26- page 2 line 4);

AA does not explicitly teach receiving at the data link provider from the data link user a request to identify a communication protocol supported by the data link provider and in response to said request, enabling the data link user to parse the communication protocol. However, Desai teaches a system of network-connected stations can communicate with many different communication protocols without modification of data link provider interface (DLPI) code (Desai, see abstract). Desai does teach receiving at the data link provider a request to identify a communication protocol supported by the data link provider (Desai, column 1 lines 39-49). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implement the teaching of a data link provider receiving a request to identify a communication protocol supported by the data link provider from a data link user since doing so would resolve protocol conflict between a data link user and a data link provider.

AA in view of Desai teaches transmitting and receiving information between a data link user and a data link provider through a data link provider interface. AA in view of Desai doesn't explicitly teach enabling the data link user to parse the communication protocol. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach enabling a data link

Art Unit: 2157

user to parse a communication protocol (Banerjee, paragraphs 43 and 71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA in view of Desai by implement the teaching of parsing a communication protocol in AA in view of Desai's response from a data link provider to data link user. One would be motivated to do so because it would allow the data link provider notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

As to claim 2, AA teaches the method of claim 1, further comprising:

in response to said request, indicating to the data link user that the medium access control type is a type not registered with the interface (AA, page 2 lines 7-10).

As to claim 3, AA teaches the method of claim 1 but fails to explicitly teach sending the data link user an XML (Extensible Markup language) document describing a format of the communication protocol. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach sending a data link user an XML (Extensible Markup language) document describing communication protocol format (paragraphs 43, 64-71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implementing an XML document describing communication protocol in the response from the data link provider to the data

Art Unit: 2157

link user because XML is a language that would especially allow interpretation of data between applications.

As to claim 4, AA teaches the method of claim 1, AA doesn't explicitly teach: sending the data link user a set of data describing a format of the communication protocol. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach sending a data link user a set of data describing communication protocol format (paragraphs 43, 64-71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by including sending a set of data describing communication protocol format in response from the data link provider to the data link user as Banerjee's teaching because it would allow data link provider notify data link user communication protocol supported by the data link provider without modification of data link provider interface code.

As to claim 5, AA teaches the method of claim 1, AA doesn't explicitly teach making available to the data link user a set of processor executable instructions for parsing a format of the communication protocol. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach making available to the data link user a set of processor executable instruction for parsing said format (paragraphs 64-71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by including making available to the data link user executable

Art Unit: 2157

instructions for parsing communication protocol format as Banerjee's teaching because it would allow the data link provider to notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

As to claim 8, AA teaches the method of claim 7, further comprising: receiving at the data link user, in response to said request to identify a medium access control type, an indication that said medium access control type is not one of a predetermined set of medium access control types registered with the interface (AA, page 2 lines 7-10).

As to claim 13, AA teaches a method of adapting a data link user for a communication protocol supported by a data link provider, wherein the data link user and data link provider communicate via an interface, comprising:

at the data link user, issuing a request to the data link provider to identify a medium access control type supported by the data link provider and at the data link provider, sending to the data link user a response comprising an indication that the medium access control type is unknown to the interface (AA, page 1 line 26-page 2 line 10). AA does not explicitly teach issuing a request to the data link provider to identify a communication protocol supported by the data link provider and sending to the data link user a response enabling the data link user to parse the communication protocol. However, Desai teaches a system of a network connected station can communicate with many different communication protocols without modification of Data link Provider Interface (DLPI) code (Desai, see abstract). Desai does teach issuing a request to the data link provider to identify

Art Unit: 2157

a communication protocol supported by the data link provider (Desai, column 1 lines 39-49). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implement the teaching of issuing a request to identify a communication protocol supported by the data link provider since doing so would resolve protocol conflict between a data link user and a data link provider.

AA in view of Desai teaches transmitting and receiving information between a data link user and a data link provider through a data link provider interface. AA in view of Desai doesn't explicitly teach enabling the data link user to parse the communication protocol. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see Abstract). Banerjee does teach enabling a data link user to parse a communication protocol (Banerjee, paragraphs 43, 71). It have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA in view of Desai by implement the teaching of enabling the data link user to parse a communication protocol in AA in view of Desai's response from a data link provider to data link user. One would be motivated to do so because it would allow the data link provider to notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

As to claim 14, AA teaches the method of claim 13 but fails to explicitly teach the request and response comprising the data link provider interface primitive commands. However, Desai teaches a system of a network connected

Art Unit: 2157

station can communicate with many different communication protocols without modification of Data link Provider Interface (DLPI) code (Desai, see abstract). Desai does teach Data link Provider Interface primitive commands (Desai, column 3 lines 27-29). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implement primitive commands in communication between Data link Provider Interface and Data link User is Desai's teaching since doing so would resolve protocol conflict between a data link user and a data link provider.

As to claim 18, AA teaches the method of claim 13, AA doesn't explicitly teach a response comprises access to a set of processor executable instructions, on the data link provider, for parsing the communication protocol. However, Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach a response comprises access to a set of processor executable instructions, on the data link provider, for parsing the communication protocol (page 4 (0064) - page 5 (0071)). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by including a response that comprises access to a set of processor executable instructions, on the data link provider, for parsing the communication protocol as Banerjee's teaching because it would allow the data link provider notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

Art Unit: 2157

As to claim 20, AA teaches a system for adapting a data link user for a communication protocol supported by data link user, comprising:

a data link provider configured to provide data link layer services; a data link user configured to access said data link services; and an extended implementation of DLPI (Data link Provider Interface) (AA, page 1 line 26-page 2 line 10), in which:

AA doesn't explicitly teach a request said data link provider identify a communication protocol supported by the data link provider and a response to said request, the data link provider offers the data link user information for parsing the communication protocol. However, Desai teaches a system of a network connected station can communicate with many different communication protocols without modification of Data link Provider Interface (DLPI) code (Desai, see abstract). Desai does teach a request to the data link provider to identify a communication protocol supported by the data link provider (Desai, column 1 lines 39-49). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implement the teaching of issuing a request to identify a communication protocol supported by the data link provider since doing so would resolve protocol conflict between a data link user and a data link provider.

AA in view of Desai teaches transmitting and receiving information between a data link user and a data link provider through a data link provider interface. AA in view of Desai doesn't explicitly teach that the data link provider offers the data link user information for parsing the communication protocol:

Art Unit: 2157

However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach that the data link provider offers to the data link user information for parsing the communication protocol (Banerjee, paragraphs 43, 71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA in view of Desai by implementing the teaching of offering information for parsing a communication protocol in AA in view of Desai's response from a data link provider to data link user. One would be motivated to do so because it would allow the data link provider to notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

As to claim 21, AA teaches the system of claim 20, wherein said data link provider comprises a device driver for a communication interface device (AA, page 1, line 26 - page 2 line 5).

As to claim 22, AA teaches the system of claim 20, wherein said data link user comprises a snoop utility (AA, page 1, line 26 - page 2 line 5). AA doesn't explicitly teach parsing a communication received by said Data link Provider. However Banerjee teaches apparatus and method of generating an XML document to represent network protocol packet exchanges (Banerjee, see abstract). Banerjee does teach parsing a communication received by data link provider (Banerjee, paragraphs 43 and 71). It would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify AA by implement the teaching of parsing a communication in AA's snoop utility as

Art Unit: 2157

Banerjee's teaching. One would be motivated to do so because it would allow the data link provider to notify the data link user communication protocol supported by the data link provider without modification of data link provider interface code.

Claims 6, 7, 9-12, 16-17, 19, and 23-26 do not add or define any additional limitations over claims 1-5, 8, 13-15, 18, and 20-22 and therefore are rejected for similar reasons.

Response to Arguments

5. Applicant's arguments filed 14 June 2005 have been fully considered but they are not persuasive. Applicants argue, in substance, that a) Desai does not teach requesting to identify a protocol supported by the data link provider; and b) Banerjee does not teach enabling a data link user to parse a protocol.

In response to a), Desai teaches recognizing the protocol being used. Thus as the claim language only states to "identify a communication protocol supported", Desai teaches such claim language, as recognizing is synonymous with identifying in the sense that Desai identifies the protocol and thus recognizes which protocol is being used. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., asking what communication protocols it handles) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are

Art Unit: 2157

not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to b), To start, it is not clear what is meant by "pars[ing] the communication protocol". While the specification does support such claim terminology on page 8, lines 9-11, suggesting Figure 3 demonstrates such activity, Figure 3 only substantially differs from Figure 2 in that the snoop utility issues a protocol request to the DLP provider and a packet format is returned to the snoop utility. Thus it is not clear what is being "parsed", only that the packet format is being returned. A standard definition of parse being received from techweb.com, for example, being:

parse:

(1) To analyze a sentence or language statement. Parsing breaks down words into functional units that can be converted into machine language. For example, to parse the expression **sum salary for title = "MANAGER"** the word SUM must be identified as the primary command, FOR as a conditional search, TITLE as a field name and MANAGER as the data to be searched.

Parsing breaks down a natural language request, such as **"What's the total of all the managers' salaries"** into the commands required by a high-level language, such as in the example above. See name parsing.

(2) To convert from one format to another. The term is often used as a substitute for the word "convert" when continuous strings of text are scanned to find embedded format codes that must be changed. In contrast, when data are moved between different databases, that is generally known as database "conversion," because the locations of the fields in a database record are easily identified and generally do not have to be searched (scanned) to be found.

Art Unit: 2157

Thus while it is understood how a packet can be parsed for information in the packet, it is not understood what exactly is meant for a protocol to be parsed and there is no description in the drawings showing such parsing. See 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the protocol parsing must be shown or the feature(s) canceled from the claim(s).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., parsing actual packets) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Banarjee teaches using XML, which is a protocol itself, to be parsed for investigating communications problems of another protocol. Such information is gathered via a network sniffer that monitors data and parsing pertinent information gathered from packets. Thus as claim 3, for example, states such enabling of claim 1 comprising sending an XML document describing a format (which format was unclear and Applicant has currently amended to include a format of the communication protocol). Thus Banarjee teaches using an XML document describing such protocol information and in combination with AA and Desai, teaches identifying supported protocols and enabling communication thereafter.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leerssen et al, Austin et al, and Krause are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax

Art Unit: 2157

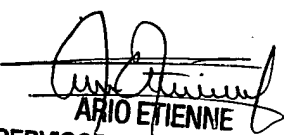
phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd 

Patent Examiner

Technology Center 2100


ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100